Manuscript Report No. 85 - 21

Furbearer Carcass Analysis and Species Status Progress Report 1984 - 85

By Rewcastle, Catherine S., 1986

Manitoba
Natural Resources
Wildlife
Biological Services

NOT FOR PUBLICATION

This manuscript report is for your information only, with the understanding that its contents are not for general distribution or publication. Many of the reports in this series are in the nature of interim progress reports, and the current data will eventually form part of final reports for publication, or will be subject to additional analysis and synthesis. The information herein is the property of the Wildlife Branch and the author reserves priority for publication. Citations should be by permission only, and referred to as a "personal communication" rather than listed under "reference".

Prepared by:

Approved by:

Supervisor

Section Chief/Director

Furbearer carcass analysis and species status. Progress Report. 1984-85.

Rewcastle, Catherine S. 1985.

Manitoba
Department of Natural Resources,
Wildlife Branch
Biological Services,
Manuscript Report No. 85-21

ABSTRACT

A total of 812 furbearer carcasses of 15 species collected from Manitoba trappers, were processed during the 1984-85 trapping season. Of these, 777 were aged by comparing the baculum and radiograph aging techniques to the cementum annuli method. A 33% discrepancy rate between methods was found for fisher (Martes pennanti), 17% for mink (Mustela vison), 10% for marten (Martes americana), red fox (Vulpes vulpes) and otter (Lutra canadensis). Furbearer populations in the sampled areas were generally healthy, except for fisher in the Southeast and Snow Lake trapping areas.

Submitted: September, 1985

Distributed: June, 1986.

TABLE OF CONTENTS

	Page
ABSTRACT	i
TABLE OF CONTENTS	ii
LIST OF TABLES	iii
LIST OF FIGURES	iii
LIST OF APPENDICES	iii
INTRODUCTION	1
METHODS	2
RESULTS	3
DISCUSSION	9
LITERATURE CITED	12
APPENDIX	14

LIST OF TABLES

Table		Page
1.	Summary of specimens collected listed by species	4
2.	Comparison of aging results between radiograph, bacula and tooth sectioning methods	6
3.	Number of adult animals aged, average and range of ages for each species	7
4.	Age-sex ratios and the relative status of furbearer populations in selected trapping areas	8
5.	Monthly harvest breakdown for 1984-85 trapping season for fisher from the southeast trapping area	9

LIST OF FIGURES

Figure		Page
1.	Trapline sections contributing specimens	5

LIST OF APPENDICES

Appendix		Page
I.	Carcass collection instructions and recording sheets . .	14
II.	Solution for skull preparation	17
III.	Species list per trapline area	19

INTRODUCTION

A variety of wildlife population status evaluation methods were presented by Overton and Davis (1969). Most of these were field methods for estimating population numbers. These methods require much time, manpower and money. An easier and acceptable method is the laboratory analysis of carcasses donated by trappers and hunters. It is possible to collect a large sample cheaply and with minimal effort and manpower. The biological information such as age:sex ratios can indicate the health and status of wildlife populations (Eberhardt 1969). Data from long-term studies of this nature can be used to estimate parameters needed to develop population models to aid in management of the species involved.

A method of determining ages of wildlife species (at least to separate juveniles from adults) is needed to calculate age:sex ratios. A variety of aging techniques for furbearers have been used by a number of authors (Friley 1949, Elder 1951, Marshall 1951, Larson and Taber 1980, Kuehn and Berg 1981, Kremke 1983, Jenks and Bowyer 1984). These methods include comparisons of baculum dimensions, pulp cavity widths using radiographs, tooth cementum annuli and skull development (suture closure and sagittal crest development). Many of the studies compare one method to another. The general concensus was that counting cementum annuli was the method that produced the best results although it is the most expensive and time consuming process. In this study a comparison between aging by tooth cementum, bacula and width of pulp cavity on radiographs was made.

METHODS

Carcasses of all furbearing species, except beaver (Castor canadensis) and muskrat (Ondatra zibethicus), were obtained from trappers throughout the province of Manitoba. Trappers were notified throughout the 1984-85 trapping season via contact with Fur Unit staff, Natural Resouces Officers (NRO), Trapline Officers (TLO) and the Manitoba Registered Trappers Association (MRTA) newsletter. An instruction sheet and recording form for catch records were issued to the trappers in many cases (Appendix I).

Carcasses were collected frozen from the field and forwarded to the fur technician in Winnipeg. They were stored frozen until time of processing. Each specimen was given a reference number and the trapper's name and address, trapline location and trap type were recorded. In females, uteri were examined for placental scars. The head was disarticulated from the body, wrapped in cheesecloth and heated in an enzyme solution (Appendix II). The baculum was removed from males and prepared with the skulls.

Skulls were cleaned after heating and the lower canine was extracted for sectioning and aging by counting annular rings in the cementum (Stephenson 1977, Larsen and Taber 1980, Kremke 1983) by Matson's Milltown, Montana. An upper canine was extracted, glued to poster board and radiographed at 40 kv for 1/10 sec at 100cm without filters. The relative width of pulp cavity was used to determine the age category (Kuehn and Berg 1981; 1983).

Bacula were weighed, measured and results graphed to separate the respective males into juvenile and adult age classes (Wright 1947, Friley 1949, Petrides 1950, Elder 1951, Marshall 1951, Wright and Coulter 1967).

All information was entered into an Apple IIe microcomputer with a profile hard disk and analyzed with APPLEWORKS data base. Data were analyzed by trapper and trapline area (Appendix III).

Trappers were acknowledged for their help and supplied with information on their donations.

RESULTS

A total of 812 furbearer carcasses of 15 species were processed and 777 were aged (Table 1). Placental scars were recorded when they were obvious to the naked eye only. Eighty-one trappers and Resources personnel throughout the province contributed (Fig. 1). Most specimens came from the Duck Mountain, Cross Lake, Norway House, Snow Lake and the Southeast trapping areas.

Reliability or concurrence of ages were compared between methods. Only small samples of Mustelid bacula could be used as some were lost, broken or boiled too long. Samples of fisher (Martes pennanti), mink (Mustela vison), marten (Martes americana) and weasels (Mustela erminea and M. frenata), were successfully classified but poor preparation of otter (Lutra canadensis) bacula precluded reliable results. For fisher, there was a discrepency in 6% of the sample between age classifications made on bacula measurements and tooth radiographs, a 33% difference between radiographs and sectioning and a 7% difference between baculum and section aging (Table 2).

TABLE 1: Summary of specimens collected, listed by species

SPECIES	No. ANALYZED	MALE			FEMALE			PLACENTAL SCARS
		JUVENILE	ADULT	UNKNOWN	JUVENILE	ADULT	UNKNOWN	TOTAL
Badger	2	1						
Beaver	9							
Coyote	8	1	1		1	4	1	30
Coloured Fox								
Cross Fox	3	2						
Red Fox	99	35	22		20	18		
Silver Fox	1	1						
Fisher	138	38		17	54		26	
Lynx	2		1			1		
Marten	179	69	52		32	23		19
Mink	186	86	35		28	27		47
Otter	53	9	19		10	13		12
Red Squirrel	11			5			6	
L.T. Weasel	3			3				
S.T. Weasel	96			94			2	
Wolf	20	5		4	7	1	3	
Wolverine	2	1	1					
TOTAL	812	248	155	106	115	141	9	134

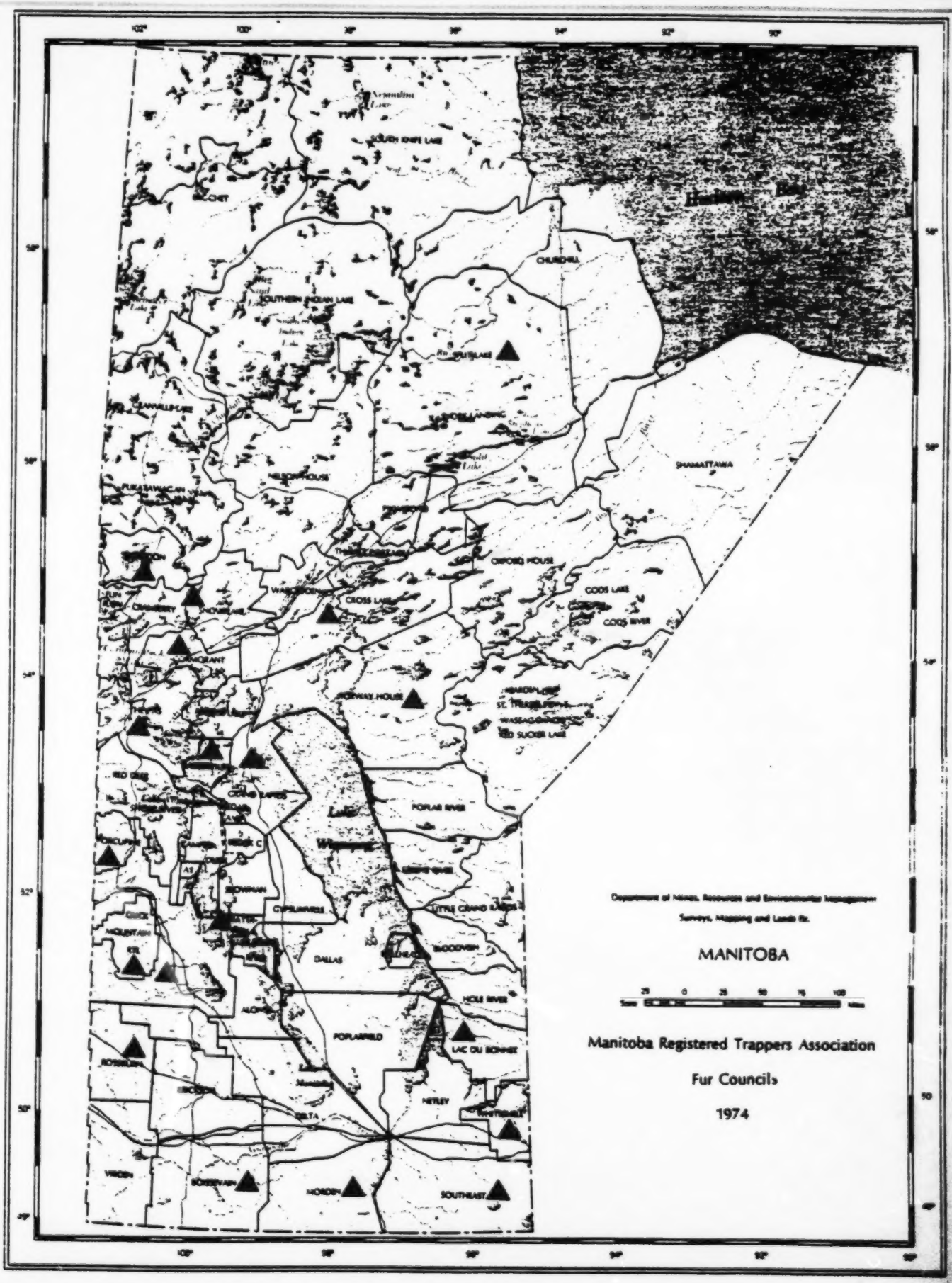
Hudson Bay
SHAMATTAWA
OXFORD HOUSE
COOS LAKE
COOS RIVER
NORWAY HOUSE
POPLAR RIVER
LITTLE GRAND RAPIDS
DAUPHIN
DAUPHIN RIVER
DAUPHIN LAKE
DAUPHIN
DAUPHIN
DAUPHIN

TABLE 2: Comparison of aging results between radiograph, baculum and tooth sectioning methods

SPECIES	No. AGED	NO. BACULUM	% Difference Between RADIOGRAPH/TOOTH SECTION	% Difference Between BACULUM/TOOTH SECTION	% Difference Between BACULUM/RADIOGRAPH
Badger	2	0	0	0	0
Beaver	9	-	-	-	
Coyote	6	0	0	-	
Coloured Fox					
Cross Fox	2	0			
Red Fox	90	0	10	-	-
Silver Fox	1	0	0	-	-
Fisher	133	15	33	7	11
Lynx	2	0	0	-	-
Marten	177	49	10	6	6
Mink	178	63	17	8	8
Otter	51	6	10	33	22
Red Squirrel	0	-	-	-	-
L.T. Weasel	3	0	-	0	-
S.T. Weasel	94	0	-	-	-
Wolf	17	0	0	-	-
Wolverine	2	0	50	0	0

A 7.8% average difference between the number of specimens aged as adults and juveniles was experienced between baculum and tooth sections for all species aged by these methods. Weasel teeth were difficult to prepare and interpretation of radiographs was impossible due to the small size of the teeth. Sections were also difficult to interpret; therefore, no comparisons between methods were made for these species. Age classifications based on radiographs were most reliable for marten and red fox (Vulpes vulpes) (all colour phases) based on comparative results with the other two methods. In general a 10.8% difference between these aged as adults and juveniles was experienced when interpreting radiographs versus tooth sections. Most of the difference was due to classifying juveniles as one year olds. Table 3 is a summary of the aging results using cementum annuli.

Table 3: Number of adult animals aged, average and range of ages for each species.

Species	Number	Cumulative Age	Average Age	Range
Coyote	5	19	3.8	1-5
Fisher	22	83	3.8	1-9
Lynx	2	5	2.5	2-3
Marten	57	193	3.4	1-11
Mink	33	98	3.0	1-8
Otter	27	72	2.7	1-9
Red Fox	28	89	3.2	1-8
S.T. Weasel	1	1	1.0	1
Wolf	6	23	3.8	1-6

Where there were sufficient sample sizes, age-sex ratios were calculated for the trapping area to determine the relative status of the population (Obbard 1984 Strickland and Douglas 1975) (Table 4) (Appendix III).

Table 4: Age-sex ratios and the relative status of furbearer populations in selected trapping areas.

Species	Number	Trapline Area	M:F	J:AF	Status
Red Fox	46	Southeast	1.30:1	2.50:1	Good
Fisher	63	Southeast	0.90:1	3.91:1	Poor
Mink	26	Southeast	1.88:1	3.50:1	Very good
Fisher	24	Whiteshell	0.60:1	1.85:1	Very poor
Marten	151	Duck Mountain	2.28:1	9.12:1	Very good
ST. Weasel	15	Duck Mountain	26.0:1	52.0:1	Very good
Mink	51	Snow Lake	2.92:1	12.7:1	Very good
Fisher	11	Snow Lake	0.57:1	2.00:1	Very good
Mink	42	Cross Lake	2.00:1	18.0:1	Very good
Fisher	17	Cross Lake	1.13:1	15.0:1	Very good

A month by month breakdown for fisher, in the Southeast reveals most were caught in December (Table 5). Late in the season 50% of the sample was adult females, the breeding stock.

Table 5: Monthly harvest breakdown for 1984-85 trapping season for fisher from the Southeast.

Species	Trapline	Month	ADM	ADF	JM	JF	M:F	J:AF
Fisher	Southeast	Nov.	1	2	2	2	0.75:1	2.00:1
		Dec.	4	5	20	17	1.09:1	6.40:1
		Jan.	2	6	2	2	0.43:1	0.60:1
Total	63		7	13	24	21	0.90:1	3.91:1

Placental scars, in mustelids particularly, were difficult to read especially after December when implantation of new fetuses was beginning. The number of placental scars confirmed for all females examined is listed on Table 1 even though these data cannot be used for a productivity analysis.

DISCUSSION

Counting the annuli in the cementum of tooth sections was one of the best and most accurate methods for Strickland and Douglas (1975), Larson and Taber (1980), Obbard (1984) and Jenks and Bowyer (1984). Interpretation of pulp cavity widths from radiographs has proven reliable for Strickland and Douglas (1975) and Jenks and Bowyer (1984). Discrepancies encountered in this study can be attributed to the inexperience of the radiograph reader. This could be resolved with more practice especially using known-aged specimens or measuring the width of the pulp cavity with calipers on the X-rays as did Jenks and Bowyer (1984) and Tumlison and McDaniel (1984). One drawback with this method is that all teeth should be glued on the same sheet at the same angle. The edges of the radiographs are usually fuzzy compared to the centre and also may lead to errors.

Problems with the sections resulted from overheating of the teeth during skull preparation. Some of the slides could not be interpreted due to heat damage of the cementum. This was particularly true for the weasels as they were small and easily overheated.

In addition some bacula were heated too long and many were lost. They became brittle and flaked apart becoming useless for aging.

The intact bacula provided a reliable estimate for age of males involved. Bacula will be prepared separately in future tests to find a better method.

Although more practice is needed to determine ages using radiographs, it is the most practical method for this type of study. Radiographs are relatively inexpensive and quick as compared to tooth cementum preparations. Teeth can be processed during or shortly after the trapping season providing information on the immediate situation and implications for management before the next seasons are set.

The age ratios, productivity, average ages of adults and the age ranges were a reflection of the furbearer status in Manitoba as well as past habitat quality and management practices. The Duck Mountain marten population was a good example of good management post re-introduction. The habitat is partially protected as it is a provincial park and trappers were conscientious about their harvest and effect on the population. The result is the present healthy population with a number of long-lived animals. The oldest collected was an 11 year old male. Overall red fox and mink populations appear to be healthy and productive.

One problem species was fisher in the Southeast, Whiteshell and Snow Lake trapline sections. The low male to female and juvenile to adult female ratios are below the suggested level of four juveniles per adult female, in order to sustain the existing trapping pressure and maintain the population (Strickland and Douglas 1975). The ratios are a reflection of overharvest in association with a diminished

primary food supply, the snowshoe hare (Lepus americanus) (W.H. Koonz, Wildlife Branch, Non-game specialist). The best solution in these situations is to enact a restrictive season or restrictive quotas to allow recovery of the species. There were insufficient data for badger), (Taxidea taxus coyote (Canis latrans), lynx (Lynx canadensis), red squirrel (Tamiasciurus hudsonicus), wolf (Canis lupus) and wolverine (Gulo gulo), to make conclusions on their population status.

LITERATURE CITED

Eberhardt, L.L. 1969. Population analysis. Pages 457-495. In Wildlife Management Techniques. Ed. R.H. Giles Jr. The Wildlife Society. Inc. Elder, W. 1951.
The baculum as an age criterion in mink. Mammal. 32:43-50.

Friley, C. 1949. Age determination, the use of the baculum, in the river otter Lutra c. canadensis Sherber. Mammal. 30:102-110.

Jenks, J. and R.T. Bowyer. 1984. Sex and age-class determination for fisher using radiographs of canine teeth. Wild. Manage. 48: 626-628.

Kuehn, D. and W. Berg. 1981. Use of radiographs to identify age-classes of fisher. Wildl. Manage. 45:1009-1010.

_____ 1983. Use of radiographs to age otter. Wildl. Soc. Bull. 11:68-69.

Kremke, K. 1983. Age determination of the raccoon (Procyon lotor) through analysis of cementum annuli. Proc. Nebr. Acad. Sci. 93:11-12.

Larson, J. and R. laber. 1980. Criteria of sex and age. Pages 143-202 in S.D. Scheminitz. ed. Wildlife management techniques manual. The Wildlife Society, Washington D.C.

Marshall, W. 1951. Any age determination for pine marten. Wildl. Manage. 15:276-283.

Obbard, M. 1984. Status of fisher in Ontario. Ontario Min. Nat. Res. Wildlife Branch. Toronto. Unpublished.

Overton, W.S. and D.E. Davis. 1969. Estimating the numbers of wildlife populations. Pages 403-455. In Wildlife Management Techniques. Ed. R.H. Giles Jr. The Wildlife Society, Inc.

Petrides, g. 1950. The determination of sex and age of fur animals. Amer. Midl. Nat. 43:355-382.

Stephenson, A.B. 1977. Age determination and morphological variation of Ontario otters. Can. J. Zool. 55:1577-1583.

Strickland, M. and C. Douglas. 1975. Advances in fisher and marten management. Unpubl. MS. Ontario Min. Nat. Res. Algonquin Region. 11 pp.

Tumlison, R. and R. McDaniel. 1984. Gray fox age classification by canine tooth pulp cavity radiographs. Wild. Manage. 48:228-230.

Wright, P. 1947. The sexual cycle of the long-tailed weasel (Mustela frenata). Jour. Mammal. 28:343-352.

Wright, P. and Coulter. 1967. Reproduction and growth in Maine fishers. Jour. Wildl. Manage. 31: 70-87.

APPENDIX I

CARCASS COLLECTION INSTRUCTIONS

GUIDELINES FOR CARCASS COLLECTION FOR THE PURPOSE OF FURBEARER POPULATION MONITORING

Trappers please:

1) Keep the whole carcass.
2) Package carcasses in airtight plastic bags and freeze immediately.
3) Tag and label specimens as to:
   a) Species
   b) Sex and age if possible
   c) Date caught
   d) Area of trapline, ie. Hole River #10
   e) Name, address and phone number or means of further contact of collector
   f) Indicate whether collector wishes the information on his collection returned.

Please keep specimens frozen.

Additional useful information

   a) Type of trap used to catch the specimens.
   b) Population trends on the trapline.
   c) Possible explanation for the trends.
   d) Any other comments or concerns about the furbearer populations.

The carcasses will be used to determine age and sex ratios for the various populations or subpopulations to establish an index of population status. These ratios can indicate whether a population is increasing or decreasing in numbers or approaching a critical level.

It is through your efforts that the furbearer populations of Manitoba can be managed for the benefit of the species and the trappers.

CATCH RECORD

NAME: _____

ADDRESS: _____

TRAPLINE: _____

Species	Date Caught	Adult or Juvenile	Male/Female	Trap Used

Comments:

Please return by April 1.

APPENDIX II

SKELETAL CLEANING PROCEDURE

Skeletal Cleaning Procedure

This method removes muscles and tendons from bones, such that they may be kept indefinitely without decomposition. The enzyme solution used consists of:

½ cup Sunlight soap

½ cup Bioadd

¼ tsp. EDTA

¼ tsp. papain,

mixed in per gallon of water required to immerse the skeleton.

Good results can be obtained with a temperature of 55°C, leaving the bones in the solution for approximately 30 hours. An underdone skeleton will require a knife to peel and scrape off the bone. An overdone skeleton is indicated by teeth falling out of the skull and articulating ends falling off the long bones. In the case of numerous skeletons being cleaned at once, cheese cloth may be used to keep the specimens separate. As the solution evaporates it may be necessary to replace some of the water such that the bone does not remain exposed. The finished bones may or may not turn out to be a clean white, depending on the condition of the carcass.

APPENDIX III

All specimens analyzed, listed by trapline area.

File: CARCASSES

Report: L151

Selection: RIL equals DUCK MIN.

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
FISHER	112788		1	0		1		Dec	UNK
			1			1			
LT. WEASE	651			0	1			Nov 15	CON11
LT. WEASE	652			0	1			Jan 4	UNK
LT. WEASE	653			0	1			Nov 23	UNK
					3				
LYNX	112811		1	2		1		Dec	SNARE
			1			1			
MARTEN	545	1		0	1			Dec	
MARTEN	535		1	4	1			Dec 19	15
MARTEN	536	1		0		1		Dec 12	15
MARTEN	540	1		0	1			Dec 12	15
MARTEN	541	1		0		1	4	Dec 10	15
MARTEN	542	1		0		1		Dec 10	15
MARTEN	549	1		0	1			Nov 30	15
MARTEN	550	1		0		1		Nov 28	15
MARTEN	551	1		0	1			Nov 27	15
MARTEN	553	1		0	1			Nov 21	15
MARTEN	554		1	4	1			Nov 24	15
MARTEN	112932		1	5	1			Dec 19	15
MARTEN	112858		1	1		1		Dec 19	15JUMP
MARTEN	112860	1		0	1			Dec 18	15JUMP
MARTEN	112861	1		0		1		Dec 18	15JUMP
MARTEN	112864		1	0	1			Dec 18	15LONSPR
MARTEN	112865	1		0		1		Dec 19	15LONSPR
MARTEN	112933	1		0		1		Dec 20	15LONSPR
MARTEN	112918	1		0	1			Nov 19	15STOPL
MARTEN	112857		1	1	1			Dec 16	4JUMP
MARTEN	112859	1		0	1			Dec 20	4JUMP
MARTEN	112862	1		0	1			Dec 20	4JUMP
MARTEN	112866		1	0	1			Dec 20	4JUMP
MARTEN	112795	1		0	1			Nov	CON11
MARTEN	112786	1		0	1			Nov	CON11
MARTEN	112799	1		0	1			Nov	CON11
MARTEN	112800		1	1		1		Nov	CON11
MARTEN	112801		1	1	1			Jan	CON11
MARTEN	112804		1	2	1			Dec 11	CON11
MARTEN	112874		1	4	1			Nov 26	CON11
MARTEN	112875	1		0	1			Dec 9	CON11
MARTEN	112876	1		0		1		Dec 26	CON11

Report: LIST

Selection: PIL equals DUCK MIN.

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
MARIEN	112877	1	J			1		Nov 26	CONII
MARIEN	112878		1 5		1			Dec 14	CONII
MARIEN	112879	1	J			1		Dec 20	CONII
MARIEN	112880	1	J		1			Dec 1	CONII
MARIEN	112881	1	J		1			Dec 10	CONII
MARIEN	112882	1	J		1			Jan 8	CONII
MARIEN	112883	1	J			1		Dec 5	CONII
MARIEN	112884	1	J		1			Dec 1	CONII
MARIEN	112885	1	J		1			Dec 1	CONII
MARIEN	112886	1	J		1			Dec 5	CONII
MARIEN	112887	1	J			1		Dec 15	CONII
MARIEN	112888	1	J			1		Dec 12	CONII
MARIEN	112889	1	J			1		Dec 9	CONII
MARIEN	112917	1	J		1			Nov 7	CONII
MARIEN	112919	1	J		1			Nov 28	CONII
MARIEN	112920	1	J		1			Nov 15	CONII
MARIEN	112921	1	J		1			Nov 9	CONII
MARIEN	112922	1	J		1			Nov 29	CONII
MARIEN	112923	1	J		1			Nov 29	CONII
MARIEN	112924	1	J		1			Nov 24	CONII
MARIEN	112929		1 1		1			Nov 4	CONII
MARIEN	112930	1	J			1		Nov 12	CONII
MARIEN	112863		1 1		1			Dec 19	JUMP
MARIEN	112944	1	J		1			Dec 27	PANIA
MARIEN	112945	1	J			1		Dec 27	PANIA
MARIEN	537		1 6		1			Dec 12	UNK
MARIEN	538		1 J			1		Dec 12	UNK
MARIEN	543	1	J			F	UNK	Dec	UNK
MARIEN	544	1	J		1			Dec	UNK
MARIEN	546	1	J		1			Dec	UNK
MARIEN	547	1	J		1			Dec	UNK
MARIEN	549		1 9		1			Dec	UNK
MARIEN	552	1	J		1			Nov 27	UNK
MARIEN	555		1 2			1	3	Dec 14	UNK
MARIEN	556	1	J		1			Nov 30	UNK
MARIEN	557		1 3			1	4	Jan 3	UNK
MARIEN	558	1	J			1		Jan 3	UNK
MARIEN	559		1 2			1	2	Jan 3	UNK
MARIEN	560		1 4		1			Jan 11	UNK
MARIEN	561		1 7			1		Jan 11	UNK
MARIEN	562		1 J			1		Dec 22	UNK
MARIEN	563	1	J		1			Dec 22	UNK
MARIEN	564		1		1			Dec 22	UNK

File: CARCASSES

Report: LIST

Selection: R/L equals DULL MIN.

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
MARTEN	565	1		J	1			Dec 22	UNK
MARTEN	566	1		J	1			Dec 22	UNK
MARTEN	567	1		J	1			Dec 22	UNK
MARTEN	568	1		J	1			Dec 22	UNK
MARTEN	112584		1	2	1			Dec	UNK
MARTEN	112585		1	2		1		Dec	UNK
MARTEN	112586	1		J	1			Dec	UNK
MARTEN	112587		1	1	1			Dec	UNK
MARTEN	112588		1	3		1		Dec	UNK
MARTEN	112589	1		J		1		Dec	UNK
MARTEN	112610		1	4		1	2	Dec	UNK
MARTEN	112611		1	J	1			Dec	UNK
MARTEN	112612		1	3	1			Dec	UNK
MARTEN	112613	1		J	1			Dec	UNK
MARTEN	112614				1			Dec	UNK
MARTEN	112615	1		J	1			Dec	UNK
MARTEN	112616	1		J	1			Dec	UNK
MARTEN	112617		1	1	1			Dec	UNK
MARTEN	112618	1		J	1			Dec	UNK
MARTEN	112619		1	J	1			Dec	UNK
MARTEN	112620		1	2	1			Dec	UNK
MARTEN	112621			9	1			Dec	UNK
MARTEN	112622		1	2	1			Dec	UNK
MARTEN	112623	1		J	1			Dec	UNK
MARTEN	112624	1		J		1		Dec	UNK
MARTEN	112625		1	1	1			Dec	UNK
MARTEN	112626	1		J	1			Dec	UNK
MARTEN	112627	1		J	1			Dec	UNK
MARTEN	112628	1		J	1			Dec	UNK
MARTEN	112629	1		J	1			Dec	UNK
MARTEN	112630	1		J	1			Dec	UNK
MARTEN	112631	1		J	1			Dec	UNK
MARTEN	112632	1		J	1			Dec	UNK
MARTEN	112787	1		J	1			Nov 24	UNK
MARTEN	112802	1		J		1		Jan	UNK
MARTEN	112803	1		J		1		Dec 11	UNK
MARTEN	112832					1		Dec	UNK
MARTEN	112839		1	J	1			Jan 80	UNK
MARTEN	112840		1	1	1			Jan 80	UNK
MARTEN	112841		1	J	1			Jan 80	UNK
MARTEN	112842		1	J	1			Jan 80	UNK
MARTEN	112843		1	3	1			Jan 80	UNK
MARTEN	112844	1		J	1			Nov 20	UNK

File: CARCASSES
Report: LIST
Selection: RTL equals BUCK MIN.

SPECIES-	SPEC. #	JUV.	ME.	YRS.	M	F	SCAR	DATE	TRAP TYP
MARTEN	112845	1	J			1			UNK
MARTEN	112846	1	J			1		Nov 15	UNK
MARTEN	112852	1	J			1		Dec	UNK
MARTEN	112853	1	J			1		Dec	UNK
MARTEN	112854		1	J		1		Dec	UNK
MARTEN	112855		1	1	1			Dec	UNK
MARTEN	112856	1	J			1		Dec	UNK
MARTEN	112867		1	4	1			Dec	UNK
MARTEN	112868		1	3	1			Dec	UNK
MARTEN	112969	1	J			1		Dec	UNK
MARTEN	112870	1	J			1		Dec	UNK
MARTEN	112871	1	J			1		Dec	UNK
MARTEN	112872	1	J		1			Dec	UNK
MARTEN	112902	1	J		1			Dec 15	UNK
MARTEN	112903	1	J		1			Dec 10	UNK
MARTEN	112904	1	J		1			Dec 16	UNK
MARTEN	112905	1	J		1			Jan 28	UNK
MARTEN	112914	1	J		1			Jan 5	UNK
MARTEN	112915	1	J		1			Nov 22	UNK
MARTEN	112916	1	J		1			Nov 5	UNK
MARTEN	112931		1	J		1		Dec	UNK
MARTEN	112934	1	J		1			Dec 20	UNK
MARTEN	112935	1	J		1			Dec 20	UNK
MARTEN	112949	1	J		1			Nov	UNK
MARTEN	112950		1	2	1			Jan 26	UNK
MARTEN	112951		1	3	1			Nov 19	UNK
MARTEN	112952		1	2	1			Nov 16	UNK
MARTEN	112953		1	11	1			Nov 21	UNK
MARTEN	112954		1	5		1		Nov 21	UNK
MARTEN	112955		1	1	1			Nov 21	UNK
MARTEN	112956		1	3	1			Nov 24	UNK
MARTEN	112957		1	J		1		Nov 24	UNK
MARTEN	112958		1	J		1		Nov 8	UNK
MARTEN	112961		1	J	1			Nov 23	UNK
		93	56		135	46	15		
MINK	112537		1	J		1		Nov 24	
MINK	112926		1	8	1			Nov 11	15STOPL
MINK	112927	1	J		1			Nov	15STOPL
MINK	112789		1	3	1			Dec 2#	4JUMP
MINK	112890		1	3		1		Nov 29	CON11
MINK	112925	1	J		1			Nov 24	CON11
MINK	112912	1	J		1			Nov 2	CON22

File: CARCASSES
Report: LIST
Selection: RIL equals DUCK MIN.

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
MINK	112913		1	6	1			Nov 22	CON22
MINK	112539	1		J	1			Jan 5	UNK
MINK	112633					1		Dec	UNK
MINK	112847					1		Nov 15	UNK
MINK	112848		1	4		1	s	Nov	UNK
MINK	112849	1		J	1			Nov 26	UNK
MINK	112873		1	2		1		Dec	UNK
MINK	112906		1	J	1			Dec 29	UNK
MINK	112907	1		J	1			Dec 2Ø	UNK
MINK	112908	1		J	1			Dec 18	UNK
MINK	112909		1	5		1	6	Dec 1Ø	UNK
MINK	112910	1		J		1		Dec 21	UNK
MINK	112911		1	4		1	4	Dec 21	UNK
MINK	112959	1		J	1			Nov	UNK
MINK	112960	1		J	1			Nov 26	UNK
		1Ø	1Ø		13	9	16		
S.T. MEAS 593				J	1			Nov	CON11
S.T. MEAS 569				J	1			Nov 2Ø	UNK
S.T. MEAS 570					1			Nov 2Ø	UNK
S.T. MEAS 571				1	1			Nov 2Ø	UNK
S.T. MEAS 572				1	1			Dec 21	UNK
S.T. MEAS 573				J	1			Dec 21	UNK
S.T. MEAS 574				J	1			Dec 21	UNK
S.T. MEAS 575				J	1			Dec 21	UNK
S.T. MEAS 576				J	1			Dec 21	UNK
S.T. MEAS 577				J	1			Dec 21	UNK
S.T. MEAS 578				J	1			Dec 21	UNK
S.T. MEAS 579				1	1			Dec	UNK
S.T. MEAS 580				2	1			Dec	UNK
S.T. MEAS 581				J	1			Dec	UNK
S.T. MEAS 582				J	1			Dec	UNK
S.T. MEAS 594				1	1			Nov	UNK
S.T. MEAS 595				J	1			Nov	UNK
S.T. MEAS 596				J	1			Nov	UNK
S.T. MEAS 597				J	1			Nov	UNK
S.T. MEAS 598				J	1			Nov	UNK
S.T. MEAS 599				J	1			Nov	UNK
S.T. MEAS 600				J	1			Nov	UNK
S.T. MEAS 601				J	1			Nov	UNK
S.T. MEAS 602				J	1			Nov	UNK
S.T. MEAS 603				J	1			Nov	UNK
S.T. MEAS 605				J	1			Nov	UNK

File: CARCASSES
Report: LIST
Selection: RIL equals BUCK MTN.

SPECIES	SPEC. #	JUV.	AD.	SEX	M	F	SCAR	DATE	TRAP TYP
S.T. MEAS 606			J		1			Nov	UNK
S.T. MEAS 607			J		1			Nov	UNK
S.T. MEAS 608			J		1			Nov	UNK
S.T. MEAS 609			J		1			Nov	UNK
S.T. MEAS 610			J		1			Nov	UNK
S.T. MEAS 611			J		1			Nov	UNK
S.T. MEAS 612			J		1			Nov	UNK
S.T. MEAS 613			J		1			Nov	UNK
S.T. MEAS 614			J		1			Nov	UNK
S.T. MEAS 615			J		1			Nov	UNK
S.T. MEAS 616			J		1			Nov	UNK
S.T. MEAS 617			J		1			Nov	UNK
S.T. MEAS 618			J		1			Nov	UNK
S.T. MEAS 619			J		1			Nov	UNK
S.T. MEAS 620					1			Nov	UNK
S.T. MEAS 621			J		1			Nov	UNK
S.T. MEAS 622			J		1			Nov	UNK
S.T. MEAS 1494			J		1			Nov	UNK
S.T. MEAS 1496			J		1			Nov	UNK
S.T. MEAS 1497			J		1			Nov	UNK
S.T. MEAS 1498			J		1			Nov	UNK
S.T. MEAS 1499			J		1			Nov	UNK
S.T. MEAS 1500			J		1			Nov	UNK
					49				
ST. WEASE 641			J		1			Dec 28	CON11
ST. WEASE 650			J		1			Dec	CON11
ST. WEASE 652			J		1			Nov 11	CON11
ST. WEASE 636			J		1			Nov 29	UNK
ST. WEASE 637			J		1			Dec 3	UNK
ST. WEASE 643			J		1			Nov 30	UNK
ST. WEASE 644			J		1			Dec 15	UNK
ST. WEASE 645			J		1			Dec	UNK
ST. WEASE 646			J		1			Dec	UNK
ST. WEASE 648			J			1		Dec 22	UNK
ST. WEASE 649			J			1		Nov 28	UNK
ST. WEASE 654			J		1			Nov 22	UNK
ST. WEASE 655			J		1			Nov 22	UNK
ST. WEASE 656			J		1			Nov 22	UNK
ST. WEASE 657					1			Nov 22	UNK
ST. WEASE 658			J		1			Nov 21	UNK
ST. WEASE 1495			J		1			Nov 5	UNK
					15	2			
		103+	68+		195+	59+	31+		

File: CARCASSES
Report: LIST
Selection: RTL equals SHOAL LAKE

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
RACCOON	112891	1	J		1			Oct 24	KPSN
		1			1				
		1*			1*				

File: CARCASSES
Report: LIST
Selection: RTL equals NEELIN

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
MINK	112943	1	J		1			Nov 2±	M±±
MINK	112962	1	J		1			Nov	M±±
MINK	112812		1	5		1		Nov 2	UNK
		2	1		2	1			
RACCOON	112946		1	2	1			Oct	KPSN
RACCOON	112821		1	2	1			Nov 3±	M±±
			2		2				
		2*	3*		4*	1*			

File: CARCASSES
Report: LIST
Selection: RTL equals KILLARNEY

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
RED FOX	112819	1	J			1		Nov 16	SPAD
		1				1			
		1*				1*			

File: CARCASSES
Report: LIST
Selection: RIL equals BARLAND

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
RACCOON	112928		1	1		1		Oct 17	CONZ2
RACCOON	112947	1		3	1			Oct 23	CONZ2
		1	1		1	1			
		1*	1*		1*	1*			

File: CARCASSES
Report: LIST
Selection: RIL equals WATERMEN

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
MINK	112936	1		3	1			Dec	UNK
MINK	112937	1		1	1			Dec	UNK
MINK	112938	1		3				Dec	UNK
MINK	112939	1		3	1			Dec	UNK
MINK	112940	1		1				Dec	UNK
MINK	112941	1		3		1		Nov	UNK
		6			3	1			
		6*			3*	1*			

File: CARCASSES

Report: LIST

Selection: RTL equals PORCUPINE

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
FISHER	112865		1	2	1			Feb 25	8 4
			1		1				
MARTEN	112795	1		3	1			Nov 22	CON11
MARTEN	112796	1		3	1			Nov 19	CON11
MARTEN	112815		1	4	1			Dec	CON22
MARTEN	112816		1	1		1		Dec	CON28
MARTEN	112817		1	5		1		Dec	CON28
MARTEN	112818		1	7	1			Dec	CON28
		2	4		4	2			
MINK	112793	1		J		1		Dec 1	CON11
MINK	112794	1		J		1		Nov 28	CON11
MINK	112797	1		J	1			Nov 28	CON11
MINK	112813	1		J		1		Dec 7	CON11
MINK	112814	1		J	1			Dec 7	CON11
MINK	112792	1		J		1		Dec	LEGHOLD
		6			2	4			
R.SQUIRRE	633					1		Dec 1	CON11
R.SQUIRRE	634					1		Dec 1	CON11
R.SQUIRRE	635					1		Dec 1	CON11
						3			
S.T. WEAS	623			J	1			Dec 1	CON11
S.T. WEAS	624			J	1			Dec 1	CON11
					2				
ST. WEASE	625			J	1			Dec 1	CON11
ST. WEASE	626			J	1			Nov 29	UNK
ST. WEASE	627			J	1			Dec 3	UNK
ST. WEASE	628				1			Dec 7	UNK
ST. WEASE	629			J	1			Dec 5	UNK
ST. WEASE	630			J	1			Dec 4	UNK
ST. WEASE	631			J	1			Dec 7	UNK
ST. WEASE	632			J	1			Nov 26	UNK
					8				
		8*	5*		17*	9*			

File: CARCASSES
Report: LIST
Selection: RTL equals CORMORANT

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
FISHER	112593		1	3		1		Jan 20	CON22
			1			1			
MARTEN	1587		1	4	1			Nov 12	1
			1		1				
OTTER	112527		1	1		1		Nov 14	CON22
OTTER	112528		1	1	1			Nov 21	CON22
			2		1	1			
SILVER FO	112533	1		J	1			Nov 14	CON22
		1			1				
WOLVERINE	112565		1	J	1			Jan 11	4
			1		1				
		1*	5*		4*	2*			

File: CARCASSES
Report: LIST
Selection: RTL equals GRAND RAPIDS

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
FISHER	112764	1		J		1		Dec	SHOT
FISHER	112765	1		J	1			Oct 30	UNK
		2			1	1			
MINK	112762	1		J		1		Dec	UNK
MINK	112763	1		J		1	6	Dec	UNK
		2				2	6		
		4*			1*	3*	6*		

File: CARCASSES

Report: LIST

Selection: RIL equals HERB L.

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
FISHER	112151	1	J			1	2	Dec 13	3
FISHER	112721		1	J	1			Mar	3
FISHER	112722		1	1	1			Mar	3
FISHER	112152	1		J	1			Dec 17	UNK
FISHER	112545		1		1			Jan 2	UNK
FISHER	112576		1	J		1		Jan	UNK
FISHER	112577		1	4		1		Jan	UNK
FISHER	112578		1	J		1		Jan	UNK
FISHER	112579			1		1	2	Jan	UNK
FISHER	112580		1	9		1		Jan	UNK
FISHER	112581		1	7		1		Jan	UNK
		2	8		4	7	4		
MINK	112549	1		J		1		Dec 30	15STOPL
MINK	112550	1		J	1			Dec 30	15STOPL
MINK	112551	1		J		1		Dec 20	15STOPL
MINK	112557	1		J		1		Dec 30	15STOPL
MINK	112559	1		J		1	3	Jan 21	15STOPL
MINK	112716		1	J	1			Mar	15STOPL
MINK	112717		1	1	1			Mar	15STOPL
MINK	112723		1	2	1			Mar	15STOPL
MINK	1501		1	3		1		Nov 9	CON11
MINK	1502	1		J	1			Nov 12	CON11
MINK	1503	1		J	1			Nov 12	CON11
MINK	1504	1		J	1			Nov 9	CON11
MINK	1505		1	2	1			Nov 12	CON11
MINK	1506	1		J	1			Nov 12	CON11
MINK	112136	1		J	1			Dec 5	CON11
MINK	112137	1		J	1			Dec 4	CON11
MINK	112138	1		J	1			Dec 4	CON11
MINK	112139	1		J	1			Dec 8	CON11
MINK	112140	1		J	1			Nov 29	CON11
MINK	112142	1		J		1	5	Dec 5	CON11
MINK	112143	1		J		1		Dec 18	CON11
MINK	112144		1	J	1			Dec 10	CON11
MINK	112145		1	1	1			Dec 16	CON11
MINK	112146		1	3	1			Dec 17	CON11
MINK	112147	1		J	1			Dec 14	CON11
MINK	112148		1	J		1	1	Dec 14	CON11
MINK	112149		1	6		1		Nov 25	CON11
MINK	112150	1		J	1			Dec 3	CON11
MINK	112199	1		J	1			Nov 9	CON11
MINK	112200	1		J	1			Nov 9	CON11

File: CARCASSES
Report: LIST
Selection: RTL equals HERB L.

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
MINK	112547		1	J		1		Jan 2	CON11
MINK	112548		1	J	1			Jan 21	CON11
MINK	112549	1		J	1			Nov 9	CON22
MINK	112552	1		J	1			Jan 11	UNK
MINK	112553		1	J	1			Jan 2	UNK
MINK	112554	1		J	1			Jan 16	UNK
MINK	112555	1		J	1			Jan 5	UNK
MINK	112556		1	J	1			Jan 25	UNK
MINK	112558	1		J	1			Jan 2	UNK
MINK	112560		1	J		1		Jan 4	UNK
MINK	112582	1		J	1			Jan	UNK
MINK	112583		1	J		1		Jan	UNK
MINK	112584	1		J	1			Jan	UNK
MINK	112585	1		J	1			Jan	UNK
MINK	112586	1		J	1			Jan	UNK
MINK	112587	1		J		1		Jan	UNK
MINK	112588	1		J	1			Jan	UNK
MINK	112589	1		J	1			Jan	UNK
MINK	112590				1			Jan	UNK
MINK	112591	1			1			Jan	UNK
MINK	112592	1		J	1			Jan	UNK
		34	16		38	13	9		
OTTER	112134		1	2		1	2	Nov 30	CON22
OTTER	112135	1		J		1		Dec 5	CON22
OTTER	112141	1		J		1	2	Dec 8	CON22
OTTER	112520		1	J	1			Nov 9	CON22
OTTER	112529	1		J	1			Nov 12	CON22
OTTER	112540	1		J	1			Jan 11	CON22
OTTER	112541		1	2		1		Jan 27	CON22
OTTER	112542	1		J	1			Jan 8	CON22
OTTER	112543			J		1	4	Jan 5	CON22
OTTER	112544		1	1		1	2	Dec 29	CON22
OTTER	112545		1	J	1			Jan 27	CON22
OTTER	112718		1	J		1	2	Mar 7	CON22
OTTER	112719		1	J	1			Mar 1	CON22
OTTER	112720		1	3		1	PREG	Mar 4	CON22
		5	8		6	8	12		
WOLVERINE	112575	1		J	1			Jan	UNK
		1			1				
		42*	32*		49*	28*	25*		

File: CARCASSES

Report: LIST

Selection: RTL contains CROSS

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
BEAVER	112469					1		Dec 28	CON33
BEAVER	112523					1		Nov 22	CON33
BEAVER	112652				1			Jan 26	SNARE
BEAVER	112653				1			Jan 26	SNARE
BEAVER	112680					1		Dec 13	UNK
BEAVER	112681				1			Dec 13	UNK
BEAVER	112682				1			Dec 13	UNK
BEAVER	112683					1		Dec 13	UNK
BEAVER	112685				1			Feb 3	UNK
BEAVER	112686							Feb 3	UNK
BEAVER	112687							Feb 3	UNK
BEAVER	112688							Feb 3	UNK
BEAVER	112689							Feb	UNK
					5	4			
FISHER	112462	1		J		1		Dec 12	1
FISHER	112468	1		J		1		Dec 29	15
FISHER	112469		1			1	1	Dec 28	15
FISHER	112518	1		J	1			Dec	15
FISHER	112546	1		J		1		Nov	15
FISHER	112644	1		J		1	2	Nov	15
FISHER	112645	1		J		1		Nov	15
FISHER	112680	1		J	1			Dec	15
FISHER	112464	1		J	1			Dec 12	2
FISHER	112466	1		J		1		Nov 14	2
FISHER	112467	1		J		1		Nov 14	2
FISHER	112481		1	J	1			Jan 11	2
FISHER	112463		1	4	1			Dec 12	3
FISHER	112528	1		J	1			Dec 12	3
FISHER	112465	1		J	1			Dec 12	UNK
FISHER	112489	1		J	1			Jan	UNK
FISHER	112669	1		J	1			Dec	UNK
		14	3		9	8	3		
MARTEN	585		1	4		1		Dec	1
MARTEN	112692		1	4	1			Dec	1
MARTEN	112693		1	7	1			Dec	1
MARTEN	112694	1		J	1			Dec	1
MARTEN	112695		1	3	1			Dec	1
MARTEN	112696		1	5	1			Dec	1
MARTEN	112697	1		J	1			Dec	1
MARTEN	112698		1	1		1		Dec	1
MARTEN	112699		1	1	1			Dec	1

File: CARCASSES
Report: LIST
Selection: RIL contains CROSS

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
MARTEN	112700		1	1	1			Dec	1
MARTEN	112634		1	J		1	4	Dec	CON11
MARTEN	112635	1		J		1		Dec	CON11
MARTEN	112636	1		J		1		Dec	CON11
MARTEN	112637		1	4	1			Dec	CON11
MARTEN	112638	1		J		1		Dec	CON11
MARTEN	112639		1	J	1			Dec	CON11
MARTEN	112640	1		J	1			Dec	CON11
MARTEN	112641		1	6		1		Dec	CON11
MARTEN	112643		1	J	1			Dec	CON11
MARTEN	112642		1	3		1		Dec	UNK
		5	14		12	8	4		
MINK	112461		1			1		Dec 12	1
MINK	112492	1		J		1	4	Nov 17	1
MINK	112495	1		J		1	2	Dec 11	1
MINK	112496	1		J	1			Dec 11	1
MINK	112497	1		J		1		Dec 1	1
MINK	112498		1	1	1			Dec 1	1
MINK	112594	1		J	1			Dec 12	1
MINK	112595	1		J	1			Dec 13	1
MINK	112596	1		J	1			Dec 12	1
MINK	112597		1	5	1			Dec 13	1
MINK	112598	1		3	1			Dec 12	1
MINK	112449	1		J	1			Nov 8	15
MINK	112451		1	J		1		Nov 6	15
MINK	112453	1		J	1			Nov 8	15
MINK	112456		1	J		1		Nov 6	15
MINK	112457	1		J	1			Nov 8	15
MINK	112458	1		J	1			Nov 8	15
MINK	112459	1		J		1		Nov 6	15
MINK	112460		1	J		1		Nov 6	15
MINK	112490	1		J		1		Nov 9	15
MINK	112490	1		J		1		Nov 9	15
MINK	112491	1		J		1	2	Nov 10	15
MINK	112493	1		J	1			Nov 10	15
MINK	112522		1	J	1			Dec 10	15
MINK	112647	1		J	1			Jan	15
MINK	112649	1		J	1			Dec	15
MINK	112448	1		J	1			Nov 8	2
MINK	112450		1	J	1			Nov 8	2
MINK	112452	1		J	1			Nov 8	2
MINK	112454	1		J	1			Nov 8	2

File: CARCASSES
Report: LIST
Selection: RTL contains CROSS

SPECIES-	SPEC. #	JUV.	AD.	VRS.	M	F	SCAR	DATE	TRAP TYP
MINK	112455		1	3		1		Nov 6	2
MINK	112651		1	J	1			Feb 9	CON22
MINK	112499	1		J	1			Dec	UNK
MINK	112500	1		J	1			Dec	UNK
MINK	112501	1		J	1			Dec	UNK
MINK	112502	1		J	1			Dec	UNK
MINK	112503	1		J	1			Dec	UNK
MINK	112504	1		J		1		Dec	UNK
MINK	112505	1		J		1		Dec	UNK
MINK	112648		1	J	1			Jan	UNK
MINK	112677	1		J	1			Dec	UNK
MINK	112678	1		J	1			Jan	UNK
		31	11		28	14	8		
OTTER	112484	1		J	1			Nov 18	15
OTTER	112650			1		1		Dec	15
OTTER	112681		1	6	1			Nov	15
OTTER	112682		1	1		1		Nov	15
OTTER	112488		1	3	1			Nov 5	CON22
OTTER	112599	1		J		1		Dec	CON22
OTTER	112521	1		J	1			Dec 12	CON33
OTTER	112485	1		J		1		Nov 9	SHOT
OTTER	112486	1		J		1		Nov 5	SHOT
OTTER	112506		1	J	1			Dec	UNK
		5	4		5	5			
R.SQUIRRE	586							Jan	1
R.SQUIRRE	1487				1			Dec 12	1
R.SQUIRRE	1487					1		Dec 12	1
R.SQUIRRE	1488					1		Dec 12	1
R.SQUIRRE	1489				1			Dec 28	1
R.SQUIRRE	1490				1			Nov 22	1
R.SQUIRRE						1		Dec	15
R.SQUIRRE								Dec	UNK
					3	3			
RED FOX	112511	1		J	1			Nov 10	2
RED FOX	112646	1		J		1		Dec	4
RED FOX	112510	1		J	1			Nov 10	SNARE
RED FOX	112508	1		J		1		Dec 1	UNK
		4			2	2			
S.T. WEAS	588			J	1			Dec	1

File: CARCASSES
Report: LIST
Selection: RTL contains CROSS

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
S.T.	MEAS 589			J	1			Dec	1
S.T.	MEAS 1484			J	1			Dec 12	1
S.T.	MEAS 1485			J	1			Nov 6	1
S.T.	MEAS 1491			J	1			Nov 17	1
S.T.	MEAS 583			J	1			Dec	15
S.T.	MEAS 584			J	1			Jan	15
					?				
	WOLF 112684		1	3	1			Jan 31	45NEWHSE
	WOLF 112992	1		J	1			Nov 5	SHOT
	WOLF 112965				1			Jan 4	SHOT
	WOLF 112507		1	5				Jan	UNK
		1	2		3				
		61*	34*		74*	44*	15*		

File: CARCASSES

Report: LIST

Selection: RTL equals NORWAY HOUSE

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
FISHER	112472	1		2	1			Dec 14	15
FISHER	112476	1		3		1		Dec 14	15
FISHER	112512	1		3	1			Dec 18	4
FISHER	112513	1		3	1			Dec 15	4
FISHER	112514		1	3		1		Dec 12	4
FISHER	112515	1		3	1			Dec 11	4
FISHER	112516	1		3	1			Dec 14	4
FISHER	112517	1		3		F	6	Dec 14	4
FISHER	112683		1	3		1		Dec °	CON22
		7	2		5	3	6		
MINK	112473					1	6	Dec 15	15
MINK	112474	1		3	1			Dec 15	15
MINK	112475	1		3	1			Dec 15	15
MINK	112478	1		3	1			Dec 11	15
MINK	112479	1		3	1			Dec 13	15
MINK	112477	1		3	1			Dec 11	4
		5			5	1	5		
OTTER	112480	1		3		1		Dec 14	1
OTTER	112482		1	6	1			Dec 12	CON22
OTTER	112483		1	1	1			Dec 10	CON22
OTTER	112691	1		3	1			Feb 4	CON22
		2	2		3	1			
RED FOX	112509	1		3		1		Nov 20	SNARE
RED FOX	112519	1		3	1			Dec 20	SNARE
		2			1	1			
WOLF	112963		1	5					
WOLF	112964	1		3					
WOLF	112698		1	4	1			Feb 10	2
WOLF	112470	1		3		1		Nov 20	COIL
WOLF	112471		1	4	1			Dec 8	45NEWHSE
		2	3		2	1			
		18*	7*		16*	7*	12*		

File: CARCASSES
Report: LIST
Selection: ATL equals THE PAS

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
COYOTE						1		Jan	UNK
COYOTE	112566		1	5		1	11	UNK	UNK
COYOTE	112567		1	3		1	7	UNK	UNK
			2			3	18		
FISHER	112562		1	3		1		Nov 8	LEGHOLD
FISHER	112561	1		3	1			Dec	MSHE
FISHER	112564			3	1			Dec	UNK
		1	1		2	1			
MINK	112531		1	3	1			Nov 14	1
MINK	112532	1		3		1		Nov 5	CON11
MINK	112494	1		3	1			Dec 19	CON12
MINK	112568		1	3		1		Dec	UNK
		2	2		2	2			
OTTER	112525	1		3	1			Nov 4	4JUMP
OTTER	112487		1	5	1			Dec 21	UNK
		1	1		2				
R.SQUIRRE	1493				1			Nov 5	1
					1				
S.T. WEAS	1492			1	1			Nov 5	CON22
					1				
WOLF	112999				1			Feb	45 NEWHO
WOLF	112893	1		3		1		Jan 29	45NEWHSE
WOLF	11300					1		Jan 4	SHOT
WOLF	112895	1		3		1		Nov	SHOT
WOLF	112896		1	2		1		Jan 21	SHOT
WOLF	112897	1		3		1		Jan 21	SHOT
WOLF	112898	1		3	1			Dec	SHOT
WOLF	112899	1		3	1			Dec	SHOT
WOLF	112900	1		3		1		Jan 24	SHOT
WOLF	112894	1		3	1			Dec	UNK
		7	1		4	6			
		11*	7*		12*	12*	18*		

File: CARCASSES
Report: LIST
Selection: RTL equals SHERRIDON

SPECIES	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
MINK	112563		1	J		1	2	Dec	UNK
			1			1	2		
OTTER	112571	1		J		1		Dec	M&JP
OTTER	112569		1	J		1		Dec	UNK
OTTER	112570	1		J	1			Dec	UNK
OTTER	112572	1		J		1		Dec	UNK
OTTER	112573		1	?	1			Dec	UNK
OTTER	112574		1	J	1			Dec	UNK
		3	3		3	3			
		3*	4*		3*	4*	2*		

File: CARCASSES
Report: LIST
Selection: RTL equals SPLIT LAKE

SPECIES	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
OTTER	112524		1	J	1			Nov	CON22
			1		1				
			1*		1*				

File: CARCASSES

Report: LIST

Selection: RTL equals HORNDEAN

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAP	DATE	TRAP TYP
BADGER	112758	1		J	1			Nov	UNK
BADGER	112835		1	2	1			Nov	UNK
		1	1		2				
COYOTE	112806	1		J	1			Dec	SHOT
		1			1				
RED FOX	112707	1		J	1			Dec	SHOT
RED FOX	112771	1		J	1			Dec	SHOT
RED FOX	112772		1	J	1			Dec	SHOT
RED FOX	112777	1		J	1			Dec	SHOT
RED FOX	112831		1	J	1			Dec	SHOT
RED FOX	112701		1	J		1	5	Dec	UNK
RED FOX	112702		1	1	1			Dec	UNK
RED FOX	112703		1	J	1			Dec	UNK
RED FOX	112704		1	J	1			Dec	UNK
RED FOX	112705	1		J	1			Dec	UNK
RED FOX	112708	1		J	1			Dec	UNK
RED FOX	112709	1		J		1		Dec	UNK
RED FOX	112710	1		J	1			Dec	UNK
RED FOX	112711	1		J	1			Dec	UNK
RED FOX	112773	1		J	1			Dec	UNK
RED FOX	112775		1	J		1		Dec	UNK
RED FOX	112776		1	1	1			Dec	UNK
RED FOX	112823	1		J		1		Dec	UNK
RED FOX	112824		1	2	1			Dec	UNK
RED FOX	112825	1		J	1			Dec	UNK
RED FOX	112830		1	1	1			Dec	UNK
		11	10		17	4	5		
		13*	11*		28*	4*	5*		

File: CARCASSES

Report: LIST

Selection: RTL equals LAC DU BONNET

SPECIES	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
FISHER	112747		1	3	1			Dec	Mo##
FISHER	112837		1	7		1		Dec	UNK
			2		1	1			
MINK	112769		1	4	1			Dec 28	15F40DE0
MINK	112790	1		J	1			Dec 14	Mo##
		1	1		2				
OTTER	112850		1	4	1			Dec 25	CON22
OTTER	112791	1		J		1			Mo##
		1	1		1	1			
ST. WEASE	638			J	1			Dec 18	UN#
ST. WEASE	639			J	1			Dec 20	UNK
ST. WEASE	640			J	1			Dec 20	UNK
					3				
		2*	4*		7*	2*			

File: CARCASSES

Report: LIST

Selection: RTL equals SOUTHEAST

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
COYOTE	112534	1		J		1	8	Nov 24	KORO
COYOTE	112851		1	4		1		Dec	KORO
COYOTE	113777		1	5		1	4	Nov 2	KORO
COYOTE	112834		1	2	1			Dec	SHOT
		1	3		1	2	12		
CROSS FOX	112168	1		J	1			Nov 18	JUMP
		1			1				
FISHER	112172		1	J		1		Nov 21	2
FISHER	112174	1		J		1		Nov 15	2
FISHER	112178	1		J	1			Dec 5	2
FISHER	112180	1		J	1			Nov 20	3
FISHER	112180	1		J	1			Nov 13	3 JUMP
FISHER	112779		1	J	1			Dec	3FAD
FISHER	112181		1	1		1		Nov 7	KORO
FISHER	112187	1				1		Nov 7	KORO
FISHER	112713		1	J	1			Dec 18	KORO
FISHER	112714		1	1		1		Jan 11	KORO
FISHER	112654		1	5		1	3	Jan 28	LEGHOLD
FISHER	112655		1	J		1		Dec 27	LEGHOLD
FISHER	112656		1	1	1			Jan 22	LEGHOLD
FISHER	112658		1	2		1	1	Dec 17	LEGHOLD
FISHER	112659		1	J		1		Dec 19	LEGHOLD
FISHER	112660	1		J		1		Dec 28	LEGHOLD
FISHER	112661		1	J		1		Dec 17	LEGHOLD
FISHER	112662	1		J	1			Jan 13	LEGHOLD
FISHER	112663		1	1		1		Jan 15	LEGHOLD
FISHER	112664		1	J		1		Jan 22	LEGHOLD
FISHER	112665		1	J		1		Dec 19	LEGHOLD
FISHER	112666		1	J		1		Dec 19	LEGHOLD
FISHER	112667		1	J		1	1	Jan 15	LEGHOLD
FISHER	112668		1	J	1			Dec 14	LEGHOLD
FISHER					1			Jan	UNK
FISHER						1		Jan	UNK
FISHER	1469		1	3		1	2	Dec	UNK
FISHER	1470		1	4		1		Dec	UNK
FISHER	1471		1	4	1			Dec	UNK
FISHER	1472	1		J	1			Dec	UNK
FISHER	1473		1	J		1		Dec	UNK
FISHER	1474	1		J		1		Dec	UNK
FISHER	1475		1	J	1			Dec	UNK
FISHER	1476		1	4		1	4	Dec	UNK

File: CARCASSES

Report: LIST

Selection: RTL equals SOUTHEAST

SPECIES-	SPEC. #	JUV.	AD.	UNKS.	M	F	SCAR	DATE	TRAP TYP
FISHER	1477		1	J		1		Dec	UNK
FISHER	1478		1	J	1			Dec	UNK
FISHER	1479	1		J	1			Dec	UNK
FISHER	1480	1		J	1			Dec	UNK
FISHER	1481	1		J	1			Dec	UNK
FISHER	1482		1	J		1		Dec	UNK
FISHER	1483		1	J		1		Dec	UNK
FISHER	112177		1	J	1			Dec 5	UNK
FISHER	112421	1		J	1			Dec	UNK
FISHER	112422	1		J	1			Dec	UNK
FISHER	112423		1	J	1			Dec	UNK
FISHER	112424		1	J		1		Dec	UNK
FISHER	112425	1		J	1			Dec	UNK
FISHER	112426	1		J	1			Dec	UNK
FISHER	112427	1		J	1			Dec	UNK
FISHER	112428	1		J	1			Dec	UNK
FISHER	112429		1	J	1			Dec	UNK
FISHER	112430		1	J		1		Dec	UNK
FISHER	112431	1		J	1			Dec	UNK
FISHER	112432	1		J		1		Dec	UNK
FISHER	112433	1		J	1			Dec	UNK
FISHER	112434		1	J		1	2	Dec	UNK
FISHER	112435	1		J	1			Dec	UNK
FISHER	112436		1	J	1			Nov	UNK
FISHER	112657		1	J		1		Dec 28	UNK
FISHER	112780		1	J		1		Dec	UNK
FISHER	112781		1	J	1			Dec	UNK
FISHER	112790		1	J		1		Dec	UNK
FISHER	112808	1		J	1			Jan	UNK
FISHER	112809		1	J		1		Jan	UNK
FISHER	112836		1	J		1		Jan	UNK
		23	40		31	34	13		
MINK	112175	1		J	1			Dec 10	15
MINK	112177		1	J		1		Nov 19	15
MINK	112176	1		J	1			Nov 28	CONI1
MINK	112675		1	J	1			Dec 20	CONI1
MINK	112676				1			Jan 15	CONI1
MINK	112672	1		J	1			Jan 13	LEGHOLD
MINK	112673		1	J	1			Dec 20	LEGHOLD
MINK	112186		1	J	1			Nov	SHOT
MINK	112191		1	J		1		Nov	SHOT
MINK	112193	1		J	1			Nov 7	SHOT

File: CAMCASSES
Report: LIST
Selection: RTL equals SOUTHEAST

SPECIES-	SPEC. #	JUV.	AD.	RES.	M	F	SCAR	DATE	TRAP TYP
MINK	112181	1		J		1		Nov 19	UNK
MINK	112437	1		J	1			Dec	UNK
MINK	112438	1			1			Dec	UNK
MINK	112439	1			1			Dec	UNK
MINK	112440		1	1		1		Dec	UNK
MINK	112441	1		J	1			Dec	UNK
MINK	112442		1	J	1			Dec	UNK
MINK	112443		1	J		1		Dec	UNK
MINK	112444		1	J		1		Dec	UNK
MINK	112445		1	J	1			Dec	UNK
MINK	112446		1	J	1			Dec	UNK
MINK	112447		1	J		1		Dec	UNK
MINK	112674				1			Jan 15	UNK
MINK	112782	1		J		1		Dec	UNK
MINK	112783		1	J	1			Dec	UNK
MINK	112784		1	J		1		Dec	UNK
		10	14		17	9			
RED FOX	112173	1		J	1			Dec 5	2
RED FOX	112180	1		J	1			Dec 5	2
RED FOX	112171	1		J	1			Nov 14	3
RED FOX	112169	1		J	1			Dec 10	3LS
RED FOX	112154	1		J	1			Nov 28	KORO
RED FOX	112155	1		J	1			Nov 28	KORO
RED FOX	112153	1		J		1		Nov 9	KORO
RED FOX	112157	1		J		1		Nov 15	KORO
RED FOX	112158		1	6		1	7	Nov 15	KORO
RED FOX	112159	1		J		1		Nov	KORO
RED FOX	112195		1	5		1	8	Nov 20	KORO
RED FOX	112197		1	3		1	8	Nov 26	KORO
RED FOX	112705		1	1		1	8	Dec	KORO
RED FOX	112712		1	1	1			Nov	KORO
RED FOX	112715		1	J		1		Nov	KORO
RED FOX	112727		1	3		1	2	Dec 26	KORO
RED FOX	112729		1	4	1			Dec 26	KORO
RED FOX	112730	1		J	1			Jan 5	KORO
RED FOX	112732	1		J	1			Dec 6	KORO
RED FOX	112733		1	3		1		Dec 20	KORO
RED FOX	112734	1		J	1			Dec	KORO
RED FOX	112740		1	1	1			Dec	KORO
RED FOX	112741	1		J	1			Dec	KORO
RED FOX	112774		1	3		1		Nov 25	KORO
RED FOX	112778	1		J	1			Nov	KORO

File: CARCASSES
Report: LIST
Selection: RTL equals SOUTHEAST

SPECIES-	SPEC. #	JUV.	AD.	YRS.	M	F	SCAR	DATE	TRAP TYP
RED FOX	112810	1		J		1		Dec	KORO
RED FOX	112832	1		J	1			Dec 6	KORO
RED FOX	112833		1	4	1			Dec 6	KORO
RED FOX	113769	1		J		1		Nov 2	KORO
RED FOX	113770	1		J	1			Nov 2	KORO
RED FOX	113771		1	5	1			Nov 2	KORO
RED FOX	113772		1	5		1	7	Nov 2	KORO
RED FOX	113773		1	1	1			Nov 2	KORO
RED FOX	113774		1	2		1	9	Nov 2	KORO
RED FOX	113775		1	1	1			Nov 2	KORO
RED FOX	113776	1		J		1		Nov 2	KORO
RED FOX	112735	1		J	1			Jan 15	LEG SNAR
RED FOX	112186	1		J		1		Nov 12	LEGHOLD
RED FOX	112729		1	3	1			Jan 12	LEGHOLD
RED FOX	112731		1	2		1		Jan 12	LEGHOLD
RED FOX	112807		1	5	1			Jan 15	LEGHOLD
RED FOX	112163	1		J	1			Nov 8	SHOT
RED FOX	112922	1		J	1			Dec	SHOT
RED FOX						1		Jan	UNK
RED FOX					1			Jan	UNK
RED FOX	112826	1		J		1		Dec	UNK
RED FOX	112827	1		J		1		Dec	UNK
		25	20		26	21	48		
S.I. MEAS	534			J	1			Nov 19	15
S.I. MEAS	590			J	1			Dec	UNK
S.I. MEAS	592			J	1			Dec	UNK
					3				
WOLF	112536	1		J		1		Nov	KORO
WOLF	112981	1		J	1			Dec	LEGHOLD
		2			1	1			
		62*	77*		80*	58*	73*		

File: CARCASSES
Report: LIST
Selection: RIL equals WHITESHELL

SPECIES-	SPEC. #	JUV.	AD.	ORS.	M	F	SCHR	DATE	TRAP TYP
CROSS FOX	112184			J		1		Dec 8	3 COIL
CROSS FOX	112133	1		J	1			Nov 18	3 DBL SP
		1			1	1			
FISHER	112758		1	-		1		Dec 13	SPARL
FISHER	112165	1		J	1			Nov 24	4
FISHER	112752		1	5		1		Jan 22	CON
FISHER						1		Dec 27	UNK
FISHER	112401			2	1			Nov	UNK
FISHER	112402	1		J	1			Nov	UNK
FISHER	112403	1		J	1			Nov	UNK
FISHER	112404		1	1		1		Nov	UNK
FISHER	112405		1	4	1			Nov	UNK
FISHER	112406		1	J		1		Nov	UNK
FISHER	112407		1	J	1			Nov	UNK
FISHER	112408	1		J	1			Nov	UNK
FISHER	112409	1		J		1		Nov	UNK
FISHER	112410	1		J	1			Nov	UNK
FISHER	112742		1	J		1		Dec 16	UNK
FISHER	112743		1	J	1			Jan 24	UNK
FISHER	112744		1	J		1		Jan	UNK
FISHER	112745		1	J		1		Jan	UNK
FISHER	112746		1	J		1		Jan	UNK
FISHER	112751		1	J		1		Jan	UNK
FISHER	112755		1	J		1		Jan	UNK
FISHER	112756		1	J		1		Dec	UNK
FISHER	113778		1	2		1		Nov 7	UNK
FISHER	113779	1		J		1		Nov 7	UNK
FISHER	113780		1	3		1		Nov 10	UNK
		7	16		9	16			
LYNX	112420		1	3	1			Dec	UNK
			1		1				
MINK	112182	1		J	1			Nov 26	15
MINK	112196			J		1		Nov 26	15
MINK					1			Dec 23	15 SINGL
MINK					1			Dec 26	15 SINGL
MINK	112164		1		1			Nov 8	3COIL
MINK	112183		1	J	1			Nov 24	CONZZ
MINK					1			Dec 23	UNK
MINK	112192		1	J	1			Dec 10	UNK
MINK	112417		1	1	1			Nov	UNK

File: CARCASSES

Report: LIST

Selection: RTL equals WHITESHELL

SPECIES- SPEC. #	JUV.	AD. YRS.	M	F	SCAR	DATE	TRAP TYP
MINK 112418	1	J	1			Dec	UNK
MINK 112419	1	J	1			Nov	UNK
MINK 112538	1	J		1		Nov	UNK
MINK 112753		1 3	1			Dec 16	UNK
MINK 112754		1 J	1			Dec	UNK
MINK 112761	1	J	1			Dec	UNK
	5	6	13	2			
OTTER 112107		1 2	1			Nov 1	4JUMP
OTTER 112189	1	4	1			Nov 24	CON33
OTTER 112190		1 2	1			Nov 28	CON33
OTTER 113781		1 3	1			Nov 21	CON33
OTTER 113782		1 4		1		Nov 22	CON33
OTTER 112411	1	J		1		Nov	UNK
OTTER 112724		1 J		1		Dec	UNK
OTTER 112725		1 1	1			Dec	UNK
OTTER 112726		1 3	1			Dec	UNK
OTTER 112749		1 1		1		Jan 22	UNK
OTTER 112750		1 J		1		Dec	UNK
OTTER 112760		1 1		1		Jan	UNK
	2	10	6	6			
P.SQUIRRE 539			1			Nov 22	15
			1				
RED FOX 112132		1 4	1			Nov 18	15
RED FOX 112166		1 J		1		Dec 8	15 S.SPR
RED FOX 112131	1	J	1			Nov 23	2 JUMP
RED FOX 112162		1 3	1			Dec 4	3
RED FOX 112185		1		1		Nov 25	3 DBL SP
RED FOX 112198		1 J		1		Dec 7	3 DBL SP
RED FOX 113783	1	J	1			Nov 19	3 DBL SP
RED FOX 113784	1	J	1			Nov 21	3 DBL SP
RED FOX 112757	1	J	1			Dec 15	CON
RED FOX 112412	1	J		1		Nov	UNK
RED FOX 112413	1	J	1			Nov	UNK
RED FOX 112414	1	J	1			Nov	UNK
RED FOX 112415	1	J		1		Nov	UNK
RED FOX 112416	1	J		1		Nov	UNK
RED FOX 112736		J		1		Dec	UNK
RED FOX 112737		1 J		1		Dec	UNK
RED FOX 112738	1	J		1		Dec	UNK
RED FOX 112739	1	J	1			Dec	UNK

File: CARCASSES
Report: LIST
Selection: RTL equals WHITESHELL

SPECIES-	SPEC. #	JUV.	AD.	SEX	M	F	SCAR	DATE	TRAP TYP
RED FOX	112748		1	J		1		Jan 22	UNK
RED FOX	112759		1	J	1			Dec	UNK
RED FOX	112767	1		J		1		Dec	UNK
		12	8		10	11			
S.T. MEAS	583			J	1			Dec 8	3 DBL SP
S.T. MEAS	597			J	1			Nov 23	4 DBL SP
S.T. MEAS					1			Jan 2	UNK
S.T. MEAS					1			Dec 29	UNK
S.T. MEAS					1			Dec 27	UNK
					5				
ST. MEASE	617			J	1			Jan 24	UNK
					1				
WOLF	112535	1		J		1		Nov	UNK
		1				1			
		28%	41%		47%	37%			